

**HYBRID FIBER OPTIC AND COAXIAL CABLE NETWORK NODE THAT
CONTAINS A CABLE MODEM TERMINATION SYSTEM**

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ABSTRACT

The present invention provides a system and method for improving the performance of a data communication system, particularly a CATV system, by dividing the functionality of the cable modem termination systems (CMTSs) into functional units, and distributing these functional units among fiber nodes or other locations throughout the data communication system. This approach provides passive return signal paths and their associated benefits.